**CSCE 5290: Natural Language Processing**

**Project Proposal**

**Project Title: Generic Sentiment Analysis**

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**Abstract**:

Sentiment analysis (SA) is the process of extracting as well as aggregating user sentiments toward a certain entity. Natural language data is abundant and has defined structures, therefore machine learning (ML) methods are commonly applied. ML approaches, based just on feature set employed, evolve to domain particular solutions with extreme precision. Sentiment Analysis is a text categorization method that focuses on subjective comments. Because it analyses views in terms of learning about public's opinion, this is also called as opinion mining. Opinion mining as well as sentiment analysis are about the same concept, and they're used alternately all throughout text. It collects and examines opinion or sentiment words using natural language processing (NLP). The branch of study that investigates people's perspectives, sentiments, assessments, attitudes, and feelings through written language is known as sentiment analysis and opinion mining. It is indeed among the most popular study fields in natural language processing, as well as a popular topic within data mining, web mining, as well as text analytics. Sentiment analysis has indeed been utilized in a variety of contexts, like analyzing the effects of occurrences on social networks including analyzing consumer perceptions on goods and services. The rise of social media platforms such like ratings, forum discussions, posts, microblogs, Tweets, as well as social networks significantly increased the relevance of sentiment analysis.

**Goals and Objectives**:

**Significance and Motivation:**

The reason for Sentiment Analysis, according to Ramteke et al. (2012), is twofold. Consumers as well as suppliers alike place a high value on "customer feedback" on services and goods. As a result, both business and academics have put a lot of work into Sentiment Analysis. It is essential for people to understand the opinions of everyone around before making a choice. Individuals who are searching for information on a certain entity often proactively read them. As a result, there are several viewpoints accessible on the Internet. Since customers began to utilize the Internet to explore their surroundings, there's been an explosion of evaluation sites and blogs wherein people may assess the benefits and drawbacks of a product or service. As a result, the development of the product or service is shaped by all these viewpoints. Vendors demand a system that can detect patterns in customer evaluations and utilize them to enhance their product or service while also identifying future needs.

**Objective**:

Sentiment classification is a technique for analysing subjective data in a text as well as subsequently extracting opinions. Sentiment analysis is the process of obtaining information through people's views, assessments, and feelings about entities, occurrences, and their properties. When it comes to making decisions, other people's views matter a lot. This is especially true when it comes to online shopping, selecting events, goods, and entities.